

What is claimed is:

11. A composition comprising a fucosyl GM1 ganglioside or a oligosaccharide portion thereof conjugated to an immunogenic protein, an adjuvant, the amounts of such conjugated ganglioside and such adjuvant being effective to stimulate or enhance antibody production in a subject, and a pharmaceutically acceptable carrier.
12. The composition of claim 1, wherein the composition comprises fucosyl GM1 ganglioside conjugated to Keyhole Limpet Hemocyanin or a derivative thereof conjugated to the ganglioside through the ceramide portion thereof.
13. The composition of claim 2, wherein the ganglioside is conjugated to Keyhole Limpet Hemocyanin or derivative thereof.
14. The composition of claim 1, wherein the adjuvant is a carbohydrate derived from the bark of a Quillaja saponaria Molina tree
15. The composition of claim 4, wherein the carbohydrate is QS-21.

sub  
B1

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15

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09534744.034560

Sub-A2

sub  
B2

6. The composition of claim 1, wherein the amount of the ganglioside is an amount between about 3  $\mu\text{g}$  to about 100  $\mu\text{g}$ .

7. The composition of claim 5, wherein the amount of QS-21 is an amount between about 30  $\mu\text{g}$  to about 100  $\mu\text{g}$ .

8. The composition of claim 1, wherein the subject is a human.

9. A method of stimulating antibody production in a subject which comprises administering to the subject an effective amount of the composition of claim 1 to stimulate antibody production.

10. The method of claim 9, wherein the composition comprises fucosyl GM1 ganglioside conjugated to Keyhole Limpet Hemocyanin or a derivative thereof conjugated to the ganglioside through the ceramide portion thereof.

11. A method of enhancing antibody production in a subject which comprises administering to the subject an effective amount of the composition of claim 1 to enhance antibody production.

12. A method of preventing cancer in a subject which

09534744.032400

Sub A3

Sub A4  
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Sub A4 7

comprises administering to the subject an amount of the composition of claim 1 effective to prevent cancer.

5 13. The method of claim 12, wherein the cancer is small cell lung cancer.

Sub A5 10 7

14. A method of treating cancer in a subject which comprises administering to the subject an amount of the composition of claim 1 effective to treat cancer.

15. The method of claim 14, wherein the cancer is small cell lung cancer.

Add A6 7

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